

CLAIMS

What is claimed is:

1. A system for providing remote resources for circuit design, comprising:
a computer system comprising a catalog database, said computer system accessible over a distributed electronic network as a specified portal site, said catalog database storing component data for use in different stages of a design process;
an application server run on said computer system, said application server connected to said catalog database; and
a network interface managed by said computer system for receiving requests to access said component data over said distributed electronic network.
2. The system of claim 1, further comprising a metrics database for maintaining prior usage information regarding visits by users to said portal site, said prior usage information comprising which option of a plurality of options was selected by a user and available characteristics of the user's design when selecting said option.
3. The system of claim 1, wherein said application server presents said plurality of options to a user based upon said prior usage information maintained in said metrics database.
4. The system of claim 2, further comprising an affinity database for maintaining profile data relating to users accessing said portal site.
5. The system of claim 4, wherein said affinity database further comprises prior usage patterns of the portal site by one or more of said users.

6. The system of claim 5, wherein said application server presents said plurality of options to a user based upon said prior usage patterns maintained in said affinity database.

7. The system of claim 1, wherein said component data for use in different stages of the design process comprises a list of available electrical components.

8. The system of claim 7, wherein said component data for use in different stages of the design process comprises one or more of the following: component data sheets, timing models, application notes, simulation models, and signal integrity models.

9. The system of claim 1, wherein said catalog database comprises electronic links to one or more supplier databases.

10. The system of claim 1, wherein said network interface receives requests for processing circuit designs and, in response thereto, said application server forwards said circuit designs to a remote computing farm for processing.

11. The system of claim 1, wherein said computer system further comprises a listing of electronic design automation software tools conditionally accessible to remote users upon request.

12. The system of claim 11, wherein said electronic design automation software tools are made accessible to remote users for a designated fee.

13. A method for providing circuit design resources from a plurality of suppliers to a plurality of end users, comprising the steps of:

connecting, on a demand basis, a plurality of user systems to a portal site over a distributed electronic network, said portal site comprising an application server interconnected with a plurality of databases;

connecting a plurality of supplier systems to said portal site over said distributed electronic network;

receiving requests from said user systems for access to any of a plurality of design resources available through said portal site; and

automatically responding to said requests from said user systems.

14. The method of claim 13, wherein said design resources include a database of component data for a plurality of available circuit components, wherein said step of receiving requests from said user systems for access to any of said plurality of design resources comprises the step of receiving a request from at least one user system for access to said database of component data, and wherein said step of automatically responding to said requests from said user systems comprises the step of transmitting component data from said portal site to said at least one user system.

15. The method of claim 14, further comprising the steps of providing a graphical interface at each user system, receiving at said user system an input selection corresponding to one of said design resources, and transmitting from said user system to said portal site an indication of said input selection;

wherein said step of receiving requests from said user systems for access to any of said plurality of design resources available through said portal site comprises the step of receiving said indication of said input selection at said portal site.

16. The method of claim 14, further comprising the steps of:
retrieving a stored user profile for a user at one of said user systems;
suggesting to the user a next action at the portal site based upon the closeness of the stored user profile to the user's current status.

17. The method of claim 13, wherein said design resources comprise electronic design automation software tools.

18. The method of claim 17, wherein said step of receiving requests from said user systems for access to any of said plurality of design resources comprises the step of receiving a request from one of said user systems for an electronic design automation software tool, providing linking information to said one of said user systems to a provider of said electronic design automation software tool, and

19. A method for providing circuit design resources from a plurality of suppliers to a plurality of end users, comprising the steps of:

receiving a user request at a portal site for a listing of providers of integrated circuit fabrication services, said user request received from a user system over a distributed electronic network;

obtaining a list of providers of integrated circuit fabrication services from a database;

transmitting said list of providers of integrated circuit fabrication services to said user system over said distributed electronic network;

receiving at the portal site, over said distributed electronic network, a selection from the user system of one of said providers of integrated circuit fabrication services;

obtaining additional information regarding the selected provider of integrated circuit fabrication services from said database;

transmitting said additional information to said user system over said distributed electronic network; and

receiving at the portal site, over said distributed electronic network, a selection from said user system of the selected provider of integrated circuit fabrication services for use.

20. The method of claim 19, further comprising the steps of:
invoking a purchasing routine; and
connecting the user system to the selected provider of integrated circuit fabrication services.

21. The method of claim 19, wherein said step of invoking said purchasing routine comprises the steps of:

transmitting, from a user logged on said user system, a request for a price quote to the selected provider of integrated circuit fabrication services over said distributed electronic network;

generating an electronic offer at the provider;

transmitting said electronic offer from the supplier to said user system over said distributed electronic network;

receiving an message from said user system accepting or declining said electronic offer;

if the offer is accepted, determining whether said user is authorized to accept said electronic offer; and

transmitting an electronic acceptance to the supplier over said distributed electronic network.

22. The method of claim 21, further comprising the steps of:

transmitting an electronic invoice from said selected provider of integrated circuit fabrication services to said user system over said distributed electronic network; and

remitting a transaction fee from the supplier to said portal site.

23. The method of claim 21, further comprising the steps of:

generating an electronic invoice at said portal site;

transmitting said electronic invoice from said portal site to said user system over said distributed electronic network;

receiving payment for said electronic invoice from said user;

deducting a transaction fee from said payment at said portal site; and

remitting the remainder of said payment to said selected provider of integrated circuit fabrication services.

24. The method of claim 19, further comprising the steps of:
invoking profiling and context routines at said portal site in response to receiving a user request at a portal site for a listing of providers of integrated circuit fabrication services; and
ordering said listing of providers of integrated circuit fabrication services based at least in part upon results of said profiling and context routines.

25. The method of claim 24, wherein said profiling and context routines include the steps of:
identifying a specific user connected to said portal site;
retrieving profile data regarding the specific user from an affinity database if said user is identified;
retrieving metrics data regarding a plurality of users from a metrics database; and
using said profile data and metrics data in said step of ordering said listing of providers of integrated circuit fabrication services.

26. The method of claim 25, wherein said profile data includes prior purchases by the specific user.

27. The method of claim 25, wherein said profile data includes prior usage patterns of the portal site by the specific user.

28. The method of claim 25, wherein said metrics data includes prior purchases by other users having similar designs.

29. The method of claim 25, wherein said metrics data includes prior usage patterns of the portal site by other users having similar designs.

30. The method of claim 19, wherein said distributed electronic network comprises the Internet.

31. The method of claim 19, further comprising the steps of:
receiving a request from said user system over said distributed electronic network for component data;
transmitting a list of component categories to said user system over said distributed electronic network;
receiving a component category selection from said user system over said distributed electronic network;
retrieving, from a component database, a list of available components corresponding to said component category selection; and
transmitting said list of available components to said user system over said distributed electronic network.

32. The method of claim 31, wherein said component data comprises component value and tolerance information.

33. The method of claim 31, further comprising the steps of:
receiving, from said user system over said distributed electronic network, a component selection of one of said available electronic components;
retrieving further information regarding the selected electronic component; and
transmitting said further information regarding the selected electronic component to said user system over said distributed electronic network.

34. The method of claim 33, wherein said further information comprises symbol and footprint data for the selected electronic component.

35. The method of claim 31, wherein said component data comprises a link to suppliers of said available electronic components.

36. The method of claim 31, further comprising the steps of:
receiving a request from said user system over said distributed electronic network for purchase of one of said available electronic components; and
invoking a purchasing routine; and
informing a supplier of said one available electronic component of said request for purchase.

37. The method of claim 1, further comprising the step of providing information and services regarding virtual circuit blocks at said portal site.

38. The method of claim 37, further comprising the steps of:
receiving a request from said user system over said distributed electronic network for virtual circuit block data;
transmitting a list of virtual circuit block categories to said user system over said distributed electronic network;
receiving a virtual circuit block category selection from said user system over said distributed electronic network;
retrieving, from a virtual circuit block database, a list of available virtual circuit blocks corresponding to said virtual circuit block category selection; and
transmitting said list of available virtual circuit blocks to said user system over said distributed electronic network.

39. The method of claim 37, further comprising the step of:
receiving, from said user system over said distributed electronic network, a selection of one of said virtual circuit blocks; and

providing the selected virtual circuit block to said user system by transmitting said virtual circuit block over said distributed electronic network.

40. The method of claim 38, further comprising the steps of
receiving a request from said user system over said distributed electronic network for further information regarding said virtual circuit blocks;

retrieving further information regarding said virtual circuit blocks at said portal site; and
transmitting said further information regarding said virtual circuit blocks to said user system over said distributed electronic network.

41. The method of claim 40, wherein said further information regarding said virtual circuit blocks comprises design data format information and integration information relating to a specified virtual circuit block.

42. The method of claim 19, further comprising the step of providing electronic design automation information and services over said distributed electronic network via said portal site.

43. The method of claim 42, comprising the steps of:
receiving a request from said user system over said distributed electronic network for electronic design automation tool information;

transmitting a list of electronic design automation tool categories to said user system over said distributed electronic network;

receiving an electronic design automation tool category selection from said user system over said distributed electronic network;

retrieving, from an electronic design automation tool database, a list of electronic design automation tools corresponding to said electronic design automation tool category selection; and transmitting said list of electronic design automation tools to said user system over said distributed electronic network.

44. The method of claim 43, further comprising the step of:
receiving, from said user system over said distributed electronic network, a selection of one of said electronic design automation tools; and
providing the selected electronic design automation tool to said user system by transmitting software for said electronic design automation tool over said distributed electronic network.

45. The method of claim 43, further comprising the steps of
receiving a request from said user system over said distributed electronic network for further information regarding said electronic design automation tools;
retrieving further information regarding said electronic design automation tools at said portal site; and
transmitting said further information regarding said electronic design automation tools to said user system over said distributed electronic network.

46. The method of claim 19, further comprising the step of providing information and services regarding computational and processing resources provided at remote sites accessible over said distributed electronic network.

47. The method of claim 46, comprising the steps of:
receiving a request from said user system over said distributed electronic network for remote computing resources information;
retrieving, from an remote computing resources database, a list of remote computing resource service providers; and

transmitting said list of remote computing resource service providers to said user system over said distributed electronic network.

48. The method of claim 47, further comprising the step of:
receiving, from said user system over said distributed electronic network, a selection of one of said remote computing resource service providers; and
providing access to said user system of computing resources at the selected remote computing resource service provider.

49. The method of claim 48, further comprising the step of transmitting, over said distributed electronic network and via said portal site, electronic design automation tool software and design data to the selected remote computing resource provider.

50. The method of claim 19, further comprising the step of providing information and services regarding experts at said portal site.

51. The method of claim 50, comprising the steps of:
receiving a request from said user system over said distributed electronic network for expert design service information;
transmitting a list of expert design service categories to said user system over said distributed electronic network;
receiving an expert design service category selection from said user system over said distributed electronic network;
retrieving, from an electronic design automation tool database, a list of experts corresponding to said expert design service category selection; and
transmitting said list of experts to said user system over said distributed electronic network.

52. The method of claim 51, further comprising the step of:
receiving, from said user system over said distributed electronic network, a selection of one of said experts; and
providing information to said user system or the selected expert to facilitate connection between said user system and said expert.

53. A method for design knowledge capture in a portal site adapted for transacting commerce relating to electronic design, comprising the steps of:
tracking movements of a plurality of users through the portal site;
storing, in a metrics database, said movements of said users through the portal site;
obtaining design data regarding the electronic design projects of said users and the information and services purchased by said users through the portal site; and
suggesting options for navigating through said portal site to a visiting user based upon the information stored in said metrics database for said users similarly situated to the visiting user.